

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Please cancel claims 3, 4, 12, 13, and 31, without prejudice.

1. (Currently Amended) A microporous ~~halopolymer~~ PTFE membrane comprising: a first surface and a second surface and a thickness and bulk defined by the first and second surfaces, the microporous PTFE membrane having a critical wetting surface tension (CWST) of at least about 40 dynes/cm (.40 erg/mm²) through the thickness and bulk of the microporous PTFE membrane, a wetting/dewetting ratio of at least about .7 for 2 or more cycles, and wherein at least one surface has a fluorine/carbon (F/C) ratio of about 1.2 or more.

2. (Currently Amended) ~~A The microporous halopolymer-PTFE membrane according to claim 1 comprising:~~
~~a first surface and a second surface and a thickness defined by the first and second surfaces, wherein at least one surface has a F/C ratio of about 1.2 or more, the membrane having a wetting/dewetting ratio of at least about 7 for 2 or more cycles, and a low level of extractables.~~

3. (Cancelled)

4. (Currently Amended) The microporous ~~halopolymer~~ PTFE membrane of claim [[3]] 6, having a CWST of at least about 40 dynes/cm (.40 erg/mm²).

5. (Currently Amended) The microporous ~~halopolymer~~ PTFE membrane of claim 1, having a water bubble point of at least about 33 psi.

6. (Currently Amended) A ~~porous halopolymer~~ microporous PTFE membrane comprising:

a first surface and a second surface and a thickness defined by the first and second surfaces, the microporous PTFE membrane having a CWST of at least ~~about 40~~ 26 dynes/cm (~~40 erg/mm²~~) (26 erg/mm²) through the thickness of the microporous PTFE membrane, and a wetting/dewetting ratio of at least about .7 for 2 or more ~~cycles~~ cycles, wherein the microporous PTFE membrane is free of a coating.

7. (Currently Amended) The ~~halopolymer-PTFE~~ PTFE membrane of claim 1, having a nominal pore size in the range of from about 0.02 to about 0.1 microns.

8. (Currently Amended) The ~~halopolymer-PTFE~~ PTFE membrane of claim 1, having a CWST of at least about 45 dynes/cm (.45 erg/mm²) through the thickness of the membrane.

9. (Currently Amended) The ~~halopolymer-PTFE~~ PTFE membrane of claim 8, having a CWST of at least about 58 dynes/cm (.58 erg/mm²).

10. (Currently Amended) The ~~halopolymer-PTFE~~ PTFE membrane of claim 2, having a water bubble point of at least about 45 psi (about 310 kPa).

11. (Currently Amended) The ~~halopolymer-PTFE~~ PTFE membrane of claim 6, having a water bubble point of at least about 75 psi (about 516.8 kPa).

12. (Cancelled)

13. (Cancelled)

14. (Currently Amended) The ~~halopolymer-PTFE~~ PTFE membrane of claim 1, which resists dewetting when contacted with hot water as a degassing fluid.

15. (Currently Amended) The ~~halopolymer-PTFE~~ PTFE membrane of claim 1, wherein at least one surface has an oxygen/carbon (O/C) ratio of about 0.15 or less.

16. (Currently Amended) The ~~halopolymer~~-PTFE membrane of claim 2, having less than about 100 ppb extractable matter.

17. (Currently Amended) The ~~halopolymer~~-PTFE membrane of claim ~~[[3]]~~ 2, having less than about 30 ppb metal extractable matter.

18. (Currently Amended) The ~~halopolymer~~-PTFE membrane of claim 6, having less than about 15 ppb metal extractable matter.

19. (Withdrawn) A method for producing a porous halopolymer membrane comprising:

exposing a porous halopolymer membrane to non-coherent UV radiation to produce a porous halopolymer membrane comprising a first surface and a second surface and a thickness defined by the first and second surfaces, the membrane having a CWST of at least 26 dynes/cm ($.26 \text{ erg/mm}^2$) through the thickness of the membrane, a water bubble point of at least about 33 psi, a wetting/dewetting ratio of at least about .7 for 2 or more cycles, and wherein at least one surface has a fluorine/carbon (F/C) ratio of about 1.2 or more.

20. (Withdrawn) A method for producing a porous halopolymer membrane comprising:

contacting a porous halopolymer membrane with a liquid to provide a liquid-treated membrane; and

exposing the liquid-treated membrane to non-coherent UV radiation.

21. (Withdrawn) The method of claim 20, wherein the liquid-treated membrane is exposed to non-coherent UV radiation two or more times.

22. (Withdrawn) The method of claim 20, wherein the non-coherent UV radiation has a wavelength in the range of from about 140 to about 350 nm.

23. (Withdrawn) The method of claim 20, wherein contacting the porous halopolymer membrane with a liquid includes contacting the membrane with a first and a second, and optionally a third, liquid.

24. (Withdrawn) The method of claim 23, wherein the first, second, and optional third liquids are different.

25. (Withdrawn) The method of claim 21, wherein contacting the porous halopolymer membrane with a liquid comprises immersing the membrane in the liquid; and exposing the liquid-treated membrane to non-coherent UV radiation comprises exposing the membrane to radiation while the membrane is immersed in the liquid.

26. (Withdrawn) The method of claim 20, wherein the non-coherent UV radiation is blackbody radiation.

27. (Withdrawn) The method of claim 20, wherein the non-coherent UV radiation is high power radiation.

28. (Withdrawn) The method of claim 20, wherein the non-coherent UV radiation is vacuum UV radiation.

29. (Withdrawn) The method of claim 19, wherein the halopolymer membrane comprises a fluoropolymer.

30. (Withdrawn) The method of claim 29, wherein the fluoropolymer comprises PTFE.

31. (Cancelled)

32. (Previously Presented) A process for treating a fluid comprising contacting the membrane claim 1 with the fluid for treating and recovering the treated fluid.

33. (Original) The process of claim 32, wherein the fluid for treating is a degassing fluid.

Please add the following claim:

34. (New) The PTFE membrane of claim 1, wherein the membrane is free of a coating.